



# Hazardous Waste Generator Requirements

**BACKGROUND:** In 1980, the Environmental Protection Agency (EPA) promulgated regulations under the authority of the Resource Conservation and Recovery Act (RCRA). These regulations subject persons that generate material(s) meeting the definition of hazardous waste to prescribed conditions and standards that govern on-site accumulation and off-site transportation of such material. These regulations also specify administrative requirements that must be met by generators managing hazardous waste. Provided persons that generate hazardous waste comply with the conditions, standards, and requirements established for generators, they remain explicitly excluded from RCRA permitting requirements for treatment, storage, and disposal (TSD) facilities. Although generators of radioactive mixed waste (RMW) (waste that has both hazardous and radioactive components) are subject to the same conditions, standards, and requirements as those established for generators of hazardous waste, they are also subject to additional standards promulgated under the authority of the Atomic Energy Act (AEA). This Information Brief focuses on those requirements that are established under RCRA.

**STATUTE:** The Resource Conservation and Recovery Act (RCRA).

**REGULATIONS:** Title 40, Code of Federal Regulations (CFR) 261.5, 262, 265, & 268.

- REFERENCES:**
1. *Definitions of Solid and Hazardous Waste Under the Resource Conservation and Recovery Act*, EH-231 Guidance Manual, DOE/EH-0273, August 3, 1992.
  2. "Availability of Provisional EPA Identification Numbers," Rule-related notice, (45 FR 85022 - 85023), December 24, 1980.
  3. "Hazardous Waste: Generators of Hazardous Waste (100 to 1000 Kilograms Per Month), on Site Storage, etc.," Final Rule, (51 FR 10146 - 10178), March 24, 1986.
  4. "Hazardous Waste Management System: Identification and Listing of Hazardous Waste Standards for Generators of Hazardous Waste," Interim final rule and request for comments, (45 FR 76620 - 76624), November 19, 1980.
  5. "Manifest Requirements," EH-231 Information Brief, EH-231-038/0494, April 1994 [Revised August 1997].
  6. "RCRA Hazardous Waste Container Labeling, Marking, and Placarding Requirements," EH-231 Information Brief, EH-231-031/0793, July 1993.
  7. "Pretransport Requirements for Waste Generators," EH-231 Information Brief, EH-231-037/0494, April 1994.
  8. "Requirements for Satellite Accumulation Areas," EH-231 Information Brief, EH-231-026/0593, July 1993.
  9. *Preparation of RCRA Contingency Plans*, EH-231 Guidance Manual, DOE/EH-0274, July 1992
  10. *Federal Environmental Reporting Requirements Handbook*, EH-231 Guidance Manual, EGD-CERCLA--001/0590, May 1990.

## How does an individual "generate" a hazardous waste?

*Generator* is defined in Title 40 of the *Code of Federal Regulations* as "...any person, by site, whose act or process produces hazardous waste identified or listed in Part 261, or whose act first causes a hazardous waste to become subject to regulation." (40 CFR 260.10). At environmental restoration sites, persons exhuming hazardous waste that was placed into or onto the land prior to being subject to regulation, qualify as generators provided the waste is exhumed after the effective date of regulations which

identify it as hazardous (i.e., exhuming the waste first causes it to become subject to regulation).

Owners and operators of hazardous waste TSD facilities also may generate hazardous waste when either of the following scenarios occurs:

- residues are produced during the treatment of hazardous waste (e.g., residual ash created by incineration of a listed hazardous waste), or
- waste becomes hazardous due to new EPA regulations (e.g., new listing or characteristic).

TSD facility owner/operators who initiate an off-site shipment of waste are subject to the requirements applicable to generators.

Whenever a waste is generated, the material must be evaluated to determine its regulatory status (i.e., a hazardous waste determination must be performed) at the initial point of generation, prior to any treatment. Accordingly each initial generator must evaluate his waste when it exits the unit in which it was produced or at the point the waste first becomes subject to regulation (e.g., the point of excavation/extraction). This evaluation may be based on either an analysis of the waste or the generator's knowledge of the materials or the processes used. (see ref. 1 for guidance on performing hazardous waste determinations)

If the waste is determined to be hazardous, the Land Disposal Restrictions (LDR) regulations found in 40 CFR Part 268 must be consulted to determine potential applicability.

### What basic notification requirement(s) must be met?

Section 3010 of RCRA requires all persons engaged in hazardous waste management activities to notify EPA or authorized states within 90 days of the regulation or activity that subjects the operation to RCRA. All generation activities occurring at one location generally should be evaluated as a single source of hazardous waste generation and result in the submittal of one notification. Upon receipt and approval of a completed notification, EPA (or authorized states) will issue the facility an identification number.

Occasionally, unanticipated events (e.g., spills during transportation) may require the rapid issuance of an EPA identification number. EPA Regional Offices will issue provisional identification numbers, without which the waste is prohibited from being transported off-site. (see ref. 2)

### How do individuals determine their generator category?

Generators of hazardous waste may fall into one of three categories—conditionally exempt small quantity generators (CESQGs), small quantity generators (SQGs), and/or full quantity generators (FQGs)—dependent on the **total** amount of hazardous waste generated on-site during a given calendar month. Generator categories and their respective threshold hazardous waste quantities are illustrated in the table below.

Depending upon the amount of hazardous waste generated in a given calendar month, generators may be subjected to different standards at different times. Accordingly, care must be taken when generators determine their generator category.

Generator status	Amount of hazardous waste generated (kg/month)
FQGs	>1000
SQGs	100-1000
CESQGs	<100, <1 acute hazardous waste, or <100 acute hazardous waste spill residue

CESQGs are exempt from most provisions of RCRA hazardous waste regulations provided the waste is characterized, accumulated waste does not exceed specified limits, and waste is either treated or disposed in an appropriate solid or hazardous waste facility.

Generators must count toward their monthly total any and all waste produced during a given month, provided that waste is subject to substantive regulations. EPA clarifies *substantive regulation* to include “regulations which are directly related to the storage, transportation, treatment, or disposal of hazardous wastes. Regulations which would not be considered ‘substantive’ ...would be requirements to notify and obtain an EPA identification number or file a biennial report.” (see ref. 3)

### How do generator regulations apply when hazardous waste generation rates fluctuate from month-to-month?

In some situations, persons may not generate hazardous waste at a uniform rate. EPA has always taken the position that a generator may be subject to different standards at different times, depending on the generation rate in a given calendar month. “If ...the generator stores separately that waste generated during a month in which less than 1000 kg (but more than 100 kg) of hazardous waste is generated, from waste generated during a month in which more than 1000 kg is generated, the former is subject to [SQG] reduced requirements, while the latter is subject to full regulation.” (see ref. 3)

This policy also holds true for generator record-keeping and reporting requirements. As EPA clarifies, “the [biennial] report of a generator whose waste is subject to full regulation under Part 262 for three months in a year would cover the generator's activity only for those three months.” (see ref. 4)

### When must generators use a hazardous waste manifest?

Generally, hazardous waste generators must prepare a Uniform Hazardous Waste Manifest or a state hazardous waste manifest prior to shipping waste off-site (unless certain limited exemptions apply). The

term *off-site* is not specifically defined within the regulations, however, EPA has interpreted off-site to mean that which is not on-site. *On-site* includes:

- contiguous property which may be divided by a public or private right-of-way, provided the entrance and exit between properties does not require movement along a public thoroughfare;
- noncontiguous properties owned by the same person, but connected by a right-of-way controlled by the owner, operator, or lessor(s), and the public does not have access.

The specific type of manifest used is dependent upon whether the generator's State or the consignee's State has its own manifest and requires its use. (see ref. 5)

### **May generators transport hazardous waste off-site without a manifest?**

EPA provides two exemptions from the manifesting requirements. First, SQGs may transport their hazardous waste off-site without a manifest, provided the waste is reclaimed under a contractual agreement (usually called a tolling agreement) which establishes the following conditions:

- The type of waste and frequency of shipments are specified in the agreement.
- The vehicle used to transport the waste to the recycling facility and to deliver the regenerated material back to the generator is owned and operated by the claimer [40 CFR 262.20(e)].

Second, shipments of hazardous waste on public roads -- i.e., *off-site*-- within or along the border of contiguous property controlled by the same person (even if the property is divided by a public or private right-of-way), are not subject to requirements for manifesting hazardous waste [40 CFR 262.20(f)].

CESQGs also are not subject to manifesting requirements. However, transporters remain free to demand a manifest.

### **Must generators meet certain conditions prior to transporting hazardous waste off-site?**

In addition to preparing a manifest, generators that transport (or offer for transport) hazardous waste off-site are subject to requirements found in Subpart C of the 40 CFR Part 262, which are based on U.S. Department of Transportation (DOT) regulations. These requirements are known as pretransport requirements and include proper accumulation, packaging, labeling, marking, and placarding. (see refs. 6 & 7)

### **What types of time limitations are prescribed for generators accumulating hazardous waste on-site?**

Under the provisions of 40 CFR 262.34, generators are afforded specified periods of time for the on-site accumulation (*storage/treatment*) of their hazardous waste without being subject to RCRA permitting or interim status. *FQGs* are afforded 90 days to accumulate hazardous waste, provided the waste is stored in accordance with the provisions identified in 40 CFR 262.34(a). *SQGs* may accumulate up to 6000 kg of hazardous waste for 180 days (270 days if the receiving facility is at least 200 miles away) provided they comply with the provisions listed in section 262.34(d). When unforeseen, temporary, and uncontrollable circumstances (e.g., TSD facility refusal of the waste or labor strikes) necessitate the accumulation of hazardous waste beyond the allowable period of time, generators may request an extension of up to 30 days.

*CESQGs* are not subject to the accumulation time limits provided amounts accumulated do not exceed allowable limits (e.g., 1000 kg of hazardous waste). If CESQGs exceed accumulation quantity limits, the CESQG's hazardous waste becomes regulated as SQG waste, subject to applicable provisions of 40 CFR Part 262. The acute hazardous waste becomes fully regulated as hazardous waste. [Accumulation periods begin the moment a generator first places hazardous waste into an accumulation unit (e.g., an empty tank).]

Satellite accumulation areas located at FQG or SQG facilities may be used to accumulate hazardous waste for an indefinite period of time, provided the established accumulation threshold of 55 gallons is not exceeded. Upon reaching 55 gallons, generators must mark the container(s) holding the excess amount with that date and move the excess to a 90/180 day accumulation point within three days. (i.e., the accumulation period applies to any excess waste three days after the 55 gallon limit has been exceeded) (see ref. 8)

### **What type of units and conditions are designated for generator storage?**

Generator regulations limit FQGs that are accumulating hazardous waste on-site to four types of units--containers, tanks, drip pads, and/or containment buildings. FQGs may also treat their hazardous waste in their accumulation tanks, containers, and/or containment buildings, provided these units remain in compliance with the generator accumulation time limits specified above, the generator pretransport requirements and conditions in 40 CFR 262.34, and the unit-specific standards in 40 CFR Part 265, which, for FQGs using *tanks* and *containers*, include organic air emissions standards in *Subpart CC*. SQG unit options are currently restricted to tanks and containers; however, sites that qualify as SQGs only are not required to comply with Subpart CC provisions.

As a condition of the accumulation provisions, FQGs/SQGs must clearly label or mark containers and tanks with the words *Hazardous Waste* and concurrently mark each container with the date each period of accumulation begins.

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CESQGs have more latitude than FQGs/SQGs and may choose to treat or dispose of their hazardous waste on-site or off-site in units other than containers, tanks, or containment buildings (e.g., waste piles or landfills). However, to remain exempt from full regulation, CESQGs must ensure the unit selected for management of their waste is an appropriate solid or hazardous waste facility, as specified in 40 CFR 261.5(f)(3) and (g)(3). For example, the unit is permitted, licensed, or registered by a State to manage municipal/industrial solid waste.

### Are generators subject to emergency preparedness standards or conditions?

Generator accumulation provisions mandate both FQGs and SQGs comply with Subpart C of 40 CFR Part 265. The requirements prescribed in this section (“Preparedness and Prevention”) are as follows:

- ❑ minimizing the possibility of fire, explosion, or unplanned releases of hazardous waste/constituents;
- ❑ maintaining specified equipment (e.g., internal communication/alarm system, fire control equipment);
- ❑ testing and maintaining the required equipment;
- ❑ ensuring immediate access to communication/alarm systems;
- ❑ maintaining aisle space to facilitate unobstructed movement during an emergency; and
- ❑ attempting to make arrangements and agreements with local emergency responders/hospitals and documenting their refusal.

FQGs are also subject to contingency plan regulations found in Subpart D of the 40 CFR Part 265 and personnel training requirements (40 CFR 265.16). Written contingency plans that describe actions to be taken by facility personnel in response to fires and/or explosions, and/or unplanned sudden or non-sudden releases must be maintained at the facility. Facilities which have previously prepared an emergency or contingency plan to comply with another regulatory requirement [e.g., Spill Prevention, Control, and Countermeasures (SPCC) Plan under 40 CFR Part 112] may amend that existing plan to incorporate hazardous waste management provisions. (see ref. 9)

Personnel training programs must ensure facility personnel receive instruction on hazardous waste management procedures (including contingency plan implementation) relevant to their positions, within the prescribed period of time (e.g., six months after the date of employment).

Although SQGs are not subject to the administrative requirements of preparing a written contingency plan or personnel training program, EPA prescribes similar substantive requirements within the accumulation provisions [40 CFR 262.34(d)(5)]. SQGs are required to ensure that at least one person is available at all times who can be contacted in the event of an emergency (i.e., fire, spill, explosion). (see ref. 10)

### Are generators subject to prescribed recordkeeping/reporting requirements?

Both FQGs and SQGs are subject to the prescribed recordkeeping and reporting requirements found in Subpart D of 40 CFR Part 262. Under this Subpart, FQGs must complete and retain copies of the following:

- ❑ executed manifests for at least three years from the date the waste was accepted by the initial transporter;
- ❑ a copy of each Biennial Report for at least three years from each report’s due date;
- ❑ a copy of each Exception Report for at least three years from each report’s due date (e.g., 45 days after the date a waste was accepted by an initial transporter); and
- ❑ records of any test results, waste analyses, or other information related to hazardous waste determinations (*including Subpart CC waste determinations*) for at least three years from the date the waste was last or disposal.

Although not listed in Subpart D, FQGs also must maintain a contingency plan and personnel training records. Training records (e.g., name, job title, and description) on current personnel must be maintained until closure, whereas records for former employees must be kept for at least three years from their last date of employment.

SQG recordkeeping/reporting requirements are similar to FQG requirements with two notable exceptions. First, SQGs are not subject to biennial reporting. Second, only SQGs are eligible for batch tolling agreements. Additional non-routine reporting requirements apply to FQGs/SQGs (e.g., emergency response notification to the National Response Center). (see ref. 10)

**Questions of policy or questions requiring policy decisions will not be dealt with in EH-231 Information Briefs unless that policy has already been established through appropriate documentation. Please refer any questions concerning the subject material covered in this Information Brief to Bill Fortune, RCRA/CERCLA Division, EH-413, (202) 586-7302, or [william.fortune@eh.doe.gov](mailto:william.fortune@eh.doe.gov).**

